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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,447	02/10/2004	Mark Kutnyak	570056.90041	9409
26710	7590	04/17/2006	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497			LEE, GUNYOUNG T	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

10/775,447

Applicant(s)

KUTNYAK, MARK

Examiner

Gunyoung T. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 24, 2006 has been entered.

Response to Amendment

2. Applicant's amendment filed on March 24, 2006 has been entered:
- Claims 8-10 have been amended;
 - Claims 23-41 have been newly added.
 - Claims 1-41 are still pending in this application, with claims 1 and 20 being independent.

Claim Objections

3. Claims 8, 23, 27, 30, 33, 37 and 39 are objected to because of the following informalities:
- The terms "**super-**", "**wide-**" and "**low-**" in line 2-3 of claims 8, 23, 27, 30, 33, 37 and 39 render the claims indefinite, because the definitions of these terms are subjective. For example, the light from an automobile headlight is **super-bright**

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when compared to the light from a candle, however the light from an automobile headlight is **not super**-bright when compared to the light from the sun;

- The use of the word "enabling" in line 4 of claims 8, 23, 27, 30, 33, 37 and 39 renders the claims indefinite, because it is unclear whether the structural limitation following the word, namely the "enabling", is part of the claimed invention (see MPEP § 2173.05(g)). It is advised by Examiner not to use optional terms (e.g. "enabling" or "capable of") in the claims.

Appropriate correction is required.

4. Claims 12, 26 and 36 are objected to because: the scope of "the circuit supporting substrates" in line 2 of claims 12, 26 and 36 lacks proper antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The claims must be given their broadest reasonable interpretation. See MPEP § 2111.

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7. The functional statement that does not direct to structural limitations of an apparatus has not been given any patentable weight (see MPEP § 2114). The functional statement "the timed mode of operation produces a strobing of the lighting elements" in lines 2-3 of claims 9, 24, 28, 31, 34, 38 and 40 is not further given any patentable weight.

8. Claims 1 and 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glatt (US 5,758,947) in view of Chien (US 5,570,946) and Mantha et al. (US 5,743,621) which is cited in the office action dated August 24, 2005.

9. Glatt discloses a safety helmet (Fig. 2).

10. In regards to claims 1 and 8-18, Glatt discloses:

- An inner core (Fig. 2, 12) of resilient, impact-reducing material (col. 2, lines 40-44) (claim 1);
- Wherein the core (Fig. 2, 12) has cavities (72, 74) (claim 1);
- An outer shell (Fig. 2, 11) overlying the core (12) (claim 1);
- Wherein the outer shell (Fig. 2, 11) has a substantially opaque outer surface except for at least two windows (80) (col. 5, lines 32-34) (claim 1);
- Wherein the windows (Fig. 2, 80) are disposed over the cavities (72, 74) (claim 1);
- A plurality of light sources (Fig. 2, 14) supplying a plurality of lighting elements (14) (claim 1);

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- Wherein the light sources (Fig. 2, 14) being disposed in the cavities (72, 74), so as to be viewed through the respective windows (col. 5, lines 27-34) (claim 1);
- A timing circuitry (Fig. 5) for timing the on-off operation of the lighting elements within the light sources (14) (col. 4, lines 8-9), so as to create an effect of motion (col. 4, lines 23-25) (claim 1);
- Wherein each light source (Fig. 2, 14) is bright, based, profiled and including a timing circuit (Fig. 5) to flash the lights (14) (col. 4, lines 25-30) (claims 8, 9);
- Wherein the light sources (Fig. 4, 14) are by a light-transmissive encapsulating material (76) (col. 5, lines 28-29) (claim 10);
- At least two circuit supporting substrates (Fig. 4, 64) supporting the light sources (14) (claim 11);
- Wherein the circuit supporting substrates (Fig. 4, 64) are flexible (col. 3, lines 3-9) (claim 12);
- A battery source (Fig. 2, 34) of power for supplying power to the light sources (claim 13);
- Two windows (Fig. 2, 80) which are at least translucent (col. 5, lines 27-34) and are located at the front and back of the headgear, respectively, and light sources being positioned inside of said respective windows (claim 14);
- The outer shell (In another embodiment) is alternatively made of a translucent material (col. 5, lines 29-31) (claim 15);
- An outer shell (Fig. 2, 82) being releasably secured (col. 4, line 67 – col. 5, line 5) (claim 16);

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- Wherein the headgear (helmet) (Fig. 2) has a smooth outer surface and aerodynamic shape (claim 17).

11. However, Glatt does not expressly disclose:

- A plurality of lighting elements within each light source (claims 1, 8);
- At least one image that is disposed on each window and illuminated by said light sources so as to be viewed externally (claim 1), wherein the image is a graphical image (claims 15, 18).

12. In regards to a plurality of lighting elements within each light source (claim 1), Mantha et al. disclose an illuminated safety helmet (Fig. 1) with a plurality of lighting elements (Fig. 6, 43) within each light source (40a, 40b).

13. In regards to the graphical image that is disposed on a window (claims 1, 15, 18), Glatt does not expressly disclose the use of a graphical image on a safety helmet.

However, Glatt discloses that the invented safety helmet can be used for recreational and occupational activities (col. 1, lines 13-14). Chien discloses a protective headwear having a graphical image (Fig. 1, 7 and Fig. 3, 74) that is coated on each of the windows and illuminated by the multi-colored light sources (col. 11, lines 2-5) so as to be viewed externally.

14. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the plural lighting elements within each light source as shown in Mantha et al. and the graphical image illuminated by multi-colored light sources as shown in Chien for the safety helmet of Glatt to provide the emitting light with high intensity which illuminates through the graphical image(s) on the window. This

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will provide recreational activities (with various colors) or safety information, such as signals or signs, (with increased intensity) for better safety of the motorcycle rider.

15. Claims 2-4, 19 and 23-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glatt (US 5,758,947), Chien (US 5,570,946) and Mantha et al. as applied to claims 1 and 18 above.

16. In regards to claims 2-4, 19 and 23-32, Glatt, Chien and Mantha et al. disclose the invention substantially as claimed except for the windows with a flame shape image. However, It would have been obvious to one of ordinary skill in the art at the time of the invention to form the windows in the shape of a flame, since it has been held by the courts that the change in shape or configuration, without any criticality, is nothing more than one of numerous shapes that one of ordinary skill in the art would find obvious to provide based on the suitability for the intended final application. See *In re Dailey*, 149 USPQ 47 (CCPA 1966).

17. Claims 5-7 and 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glatt (US 5,758,947), Chien (US 5,570,946) and Mantha et al. as applied to claim 1 above.

18. In regards to claims 5-7 and 33-41, Glatt, Chien and Mantha et al. disclose the invention substantially as claimed except for the windows being at least three times the area of any light-emitting element. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the windows at least

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three times the area of the light emitting element, since it has been held that discovering an optimum value of a result-effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

19. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glatt (US 5,758,947) in view of Chien (US 5,570,946).

20. Glatt discloses a safety helmet (Fig. 2).

21. In regards to claims 20-21, Glatt discloses:

- An inner core (Fig. 2, 12) of resilient, impact-reducing material (col. 2, lines 40-44) (claim 20);
- Wherein the core (Fig. 2, 12) has at least one cavity (72, 74) (claim 20);
- An outer shell (Fig. 2, 11) overlying the core (12) (claim 20);
- Wherein the outer shell (Fig. 2, 11) has a substantially opaque outer surface except for at least two windows (80) (col. 5, lines 27-34) (claim 20);
- Wherein the windows (Fig. 2, 80) are disposed over the cavity (72, 74) (claim 20);
- A plurality of light sources (Fig. 2, 14) (claim 20);
- Wherein the light sources (Fig. 2, 14) being disposed in the cavity (72), so as to be viewed through the respective windows (col. 5, lines 27-29) (claim 20);
- A timing circuitry (Fig. 5) for timing the on-off operation of the lighting elements within the light sources (14) (col. 4, lines 8-9), so as to create an effect of motion (col. 4, lines 23-25) (claim 20).

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22. However, Glatt does not expressly disclose:

- At least one image that is disposed on each window and illuminated by said light sources so as to be viewed externally (claim 20), wherein the image is a graphical image (claims 21).

23. In regards to the graphical image that is disposed on a window, Glatt does not expressly disclose the use of a graphical image on a safety helmet. However, Glatt discloses that the invented safety helmet can be used for recreational and occupational activities (col. 1, lines 13-14). Chien discloses a protective headwear having a graphical image (Fig. 1, 7 and Fig. 3, 74) that is coated on each of the windows and illuminated by the multi-colored light sources (col. 11, lines 2-5) so as to be viewed externally.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the graphical image illuminated by multi-colored light sources as shown in Chien for the safety helmet of Glatt to provide the emitting light which illuminates through the graphical image(s) on the window. This will provide recreational activities or safety information, such as signals or signs, for better safety of the motorcycle rider.

24. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glatt (US 5,758,947) and Chien (US 5,570,946) as applied to claims 20 and 21 above.

25. In regards to claim 22, Chien and Mantha et al. disclose the invention substantially as claimed except for the windows with a flame shape image. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to

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form the windows in the shape of a flame, since it has been held by the courts that the change in shape or configuration, without any criticality, is nothing more than one of numerous shapes that one of ordinary skill in the art would find obvious to provide based on the suitability for the intended final application. See *In re Dailey*, 149 USPQ 47 (CCPA 1966).

Conclusion

26. 21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Slarve (US 4,559,586), Gouda (US 4,891,736) and Ku (US 5,147,129) show lighting devices installed in a hat or a helmet. Barry (US 5,615,940) shows a lighting system having a window with a flame image.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunyoung T. Lee whose telephone number is (571) 272-8588. The examiner can normally be reached between 7:30 - 4:00 PM.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached at (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GTL
4/10/2006

A handwritten signature in black ink, appearing to read 'JAW', is positioned above the printed name.

JOHN ANTHONY WARD
PRIMARY EXAMINER